REMARKS

Claims 1-3 and 6-9 are amended herein for clarity, and the amendments do not narrow the scope of the claims. No new matter is presented.

I. Response to Claim Rejection under 35 U.S.C. § 103

Claims 1-7 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Watanabe et al (U.S. Patent No. 6,447,913) in view of Lane (U.S. Patent No. 4,034,013).

Applicants respectfully traverse the rejection for the reasons of record as submitted in the amendment filed o February 8, 2006, the Response filed June 19, 2006 and the Amendment filed July 19, 2006, each of which is incorporated herein by reference, and additionally based on the following.

Specifically, the thermoplastic resin composition of the present invention comprises: 100 parts by weight of a thermoplastic polyester resin (A); 0. 1 to 50 parts by weight of a viscosity modifier (B) for the thermoplastic polyester resin (A); and 1 to 50 parts by weight of a core-shell graft polymer (C). The viscosity modifier (B) consists essentially of 3 to 95 % by weight of a unit (a) derived from alkyl (meth)acrylate containing an epoxy group, 5 to 97 % by weight of a unit (b) derived from another alkyl (meth)acrylate, and 0 to 92 % by weight of a unit (c) derived from an other vinyl monomer copolymerizable therewith excluding an α-olefin. Also, the viscosity modifier (B) has a weight average molecular weight of 1,000 to 400,000.

As previously pointed out Watanabe discloses a thermoplastic elastomer and a core-shell polymer as an impact resistance modifier (B), and further discloses a graft copolymer, wherein (a-2) an olefinic copolymer prepared by α-olefins and glycidyl esters of α, ß-unsaturated acids

are chemically bonded with (b) polymers such as an acrylic polymer, aromatic vinyl polymer and vinyl cyanide polymer. However, Watanabe only discloses various kinds of thermoplastic elastomers and a core-shell polymer as an impact resistance modifier (B), and does not specifically mention a thermoplastic elastomer and a core-shell polymer in combination.

The Examiner relies on Watanabe at column 3, lines 34-48 as disclosing typical examples of impact resistance rendering materials for use as component (B) including thermoplastic elastomers and core-shell polymers.

To the contrary, the subject passage relied on by the Examiner discloses each of thermoplastic elastomers and core-shell polymers as individual examples of impact resistance rendering materials (B), and not as a combination. Specifically, Watanabe states, "Typical examples of the impact resistance rendering materials (B) used in the present invention *include thermoplastic elastomers and core-shell polymers*". Examples of the thermoplastic elastomers are provided at column 3, line 46 to column 7, line 21. On the other hand, examples of core-shell polymers are disclosed at column 7, line 22 to column 8, line 15. Further, Watanabe in claim 1 recites that component (B) is ". . . selected from the group consisting of olefin-based thermoplastic elastomers, styrene-based thermoplastic elastomers, polyester-based thermoplastic elastomers, polyamide-based thermoplastic elastomers, urethane-based thermoplastic elastomers and core-shell polymers having a rubber layer of diene-based elastomers, acrylic-based elastomers *or combinations thereof*". However, no such combination is employed in the working examples disclosed in Watanabe beginning at column 12. Specifically, none of the seventeen (17) inventive examples or fifteen (15) comparative examples employs a combination

of a thermoplastic elastomer and a core-shell polymer as component (B). See Table 1 and Table 2. Thus, when taken as a whole, one of ordinary skill in the art would not consider Watanabe as teaching, suggesting or even contemplating the use of thermoplastic elastomers and core-shell polymers in combination as in the present invention.

Further, Watanabe did not recognize the synergistic effect obtainable from the combination of the specific viscosity modifier (B) and core-shell polymer (C) as shown by the test data provided in the specification. As indicated in the Response filed on June 19, 2006, the essence of the present invention lies in the synergistic effect obtainable from the combination of a specific viscosity modifier for a thermoplastic polyester resin and a core-shell graft polymer. The thermoplastic polyester resin composition of the present invention which contains both a specific viscosity modifier (B) and a core-shell graft polymer (C) exhibits excellent anti-draw down effect and Izod impact strength, as compared to resin compositions containing only one selected therefrom. See for example, Example 4 and Comparative Example 3 in Table 1 on page 32 of the specification. These unexpectedly superior results demonstrate the patentability of the present claims over the prior art.

The Examiner has taken the position that such a synergistic effect is not described in the claims or the specification. However, there is no requirement to recite such effect in the claims. Furthermore, the advantageous effects of the specific combination of a viscosity modifier and core-shell polymer is described in the specification, for example, in the paragraph bridging pages 12 and 13 and based upon a comparison of the inventive examples and at least Comparative Examples 3 to 5 in the present specification (see Table 1). This was also pointed out in the

Response filed on June 19, 2006 on page 2, and in the Amendment filed on February 2, 2006, on pages 8-9. Thus, the Examiner's statement that such a synergistic effect is not described in the claims or the specification is not accurate.

To remedy the deficiencies of Watanabe, the Examiner relies on Lane, which discloses a copolymer obtained by the process in which n-butyl acrylate, 1,3-butylene diacrylate and allyl methacrylate are polymerized to obtain an acrylic rubber in the first stage and methyl methacrylate and glycidyl methacrylate are graft-copolymerized thereto in the second stage. However, the copolymer obtained in Lane corresponds to a core-shell graft polymer (C) in the present invention, and not to the viscosity modifier (B). One of ordinary skill in the art would consider the copolymer obtained by graft-copolymerizing the monomers to the crosslinked acrylic rubber in Example of Lane as having an infinite weight average molecular weight, which is not equivalent to the viscosity modifier (B) of the present invention which has a finite weight average molecular weight of 1,000 to 400,000.

The Examiner takes the position that the weight average molecular weight is clearly disclosed by Watanabe because it only requires simple mathematical skill to calculate it. However, the disclosure of Watanabe relied on by the Examiner is not relevant to the weight average molecular weight of the copolymer obtained in the Example of Lane. Moreover, neither of Watanabe nor Lane teaches or suggests the desirability of combining a specific viscosity modifier for a thermoplastic polyester resin and a core-shell graft polymer, and the advantages attendant thereto. Thus, the references, whether taken alone or in combination, do not teach or suggest all elements of the present invention as a whole.

Even if the Examiner has made a *prima facie* showing of obviousness (which we do not concede), the evidence provided in the present specification sufficiently rebuts that presumption and the Examiner has improperly failed to consider this evidence. Regarding the data provided in the specification, the Examiner merely states in paragraph 13 of the Action, "that further evaluation of the unexpected results in terms of combining a viscosity modifier and core-shell graft polymer in the comparative examples should be done, which should be commensurate in scope with the claims." However, the Examiner has not indicated why the data provided in the specification is not commensurate in scope with the claims. MPEP § 2144.08(II)(B) provides that if the evidence is deemed insufficient, Office personnel should specifically set forth the facts and reasoning that justify this conclusion. Therefore, the Examiner is respectfully requested to provide such reasoning or withdraw the rejection.

II. Response to Claim Rejection Under 35 U.S.C. § 102

Claims 8 and 9 are rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by or, in the alternative, under 35 U.S.C. § 103 based on Lane.

Applicants respectfully traverse the rejection.

Claim 8 recites that the crystallinity of the thermoplastic polyester resin is preferably at most 20% as supported on page 7, lines 7-8, of the original specification. The present specification further discloses that when the crystallinity of the thermoplastic polyester resin is more than 20% impact strength tends to decrease. This is further illustrated in Examples 59 to 64. As indicated by the results in Table 12 on page 55, when the crystallinity is high as in example 59 with a crystallinity of 25%, the impact strength is low when the temperature of the

die for cool forming is high. On the other hand, in Examples 60 to 64 the crystallinity is low, and the impact strength is maintained. Neither of the cited references, discloses, teaches or suggests this feature of claim 8.

Claim 9 recites that the unit (a) of the viscosity modifier is derived from 65 to 95 % by weight of alkyl (meth)acrylate containing an epoxy group. Example 5 in Table 1 on page 32 of the specification exemplifies a composition wherein the GMA ratio in the monomer mixture is 65% and the results shown in Table 1 that compositions within the specified range, e.g., Examples 5, 6 and 7, provide favorable anti-draw down effect, surface gloss of the molded article and Izod impact strength. Neither of the cited references, discloses, teaches or suggests this feature of claim 9.

The Examiner states, "Lane does not disclose that a thermoplastic polyester resin composition has weight average molecular weight 1,000 to 400,000 and a crystallinity of at most 20% of the thermoplastic resin and that the unit (a) is derived from 65 to 95% by weight of alkyl(meth) acrylate containing an epoxy group", which is a mischaracterization of the claimed invention in referring to the thermoplastic polyester resin (component (A)) having weight average molecular weight of 1,000 to 400,000. Claims 8 and 9 recite that component (B), the viscosity modifier (for a thermoplastic polyester resin) has a weight average molecular weight of 1,000 to 400,000, not the thermoplastic polyester resin, which is component (A).

Lane does not disclose, teach or suggest all elements of the inventions of claims 8 and 9 and Lane does not does not disclose, teach or suggest a composition that is essentially the same as the presently claimed composition and which comprises the same ingredients. The copolymer

disclosed by Lane corresponds to the core-shell graft polymer (C) of the present invention, but Lane does not disclose teach or suggest a viscosity modifier (B) as recited in claims 8 and 9. Thus, for at least this reason, the Examiner's position with respect to inherency is not reasonable. Further, the present specification in the paragraph bridging pages 7 and 8 discloses that in a composition comprising only the thermoplastic resin (A) and a core-shell graft polymer (C), sufficient dispersibility cannot be obtained. Therefore, Comparative Examples 4 and 5 in the present specification are similar to Lane in that only a core-shell graft polymer is used without a viscosity modifier and unsatisfactory results regarding anti-draw down effect and Izod impact strength were obtained. Thus, it is clear that Lane does not anticipate nor render obvious the present invention.

Applicants also note that claims 8 and 9 include the same basic elements of components (A), (B), and (C) recited in independent claim 1 and additional elements, but independent claim 1 is not rejected over Lane as a single reference in the same manner as claims 8 and 9. Therefore, the §102 rejection is improper.

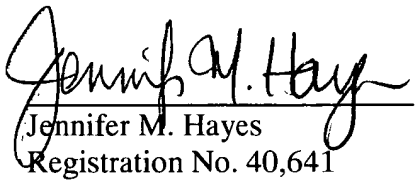
Accordingly, Applicants respectfully request withdrawal of the rejection.

III. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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